EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION
MQ-1B, "PREDATOR," S/N 05-003135
AT A DEPLOYED LOCATION ON 21 JULY 2008

On 21 July 2008, at approximately 0638 zulu (z), an MQ-1B, Predator, S/N 05-003135, was lost at a forward operating location. The MQ-1B Predator aircraft, S/N 05-003135, assigned to the 3rd Special Operations Squadron (3 SOS), 27th Special Operations Wing (27 SOW), Cannon AFB, NM, lost command and return link while flying a sortie in support of Operation ENDURING FREEDOM (OEF). Link with the aircraft was never reestablished and the aircraft was presumed crashed with no known injuries, deaths or reported property damage. The aircraft loss is valued at $3,849,000.

The mishap aircraft (MA) was flying an operational mission in support of OEF. Approximately 12.2 hours into the scheduled 22-hour flight, the Ku-band command link (CL) and return link (RL) between the aircraft and the Multiple Aircraft Control (MAC) Ground Control Station (GCS) was lost when line power to Pilot Station #2 (PS2) was interrupted by an uninterruptable power supply (UPS) failure. Power was restored to the MAC GCS and PS2 at approximately 0930z and attempts to reestablish link with the MA were unsuccessful. Based on the MA's lost link profile, which included a 30 minute loiter and 1 hour and 20 minute return to base (RTB), the expected arrival at its intended landing base was 0830z.

The Launch and Recovery Element (LRE) attempts to find the MA with Air Traffic Control (ATC), Ground Control Approach (GCA) and tower control radars showed no known position after 0731z. The LRE configured their Containerized Dual Control Station (CDCS) to attempt to locate and recover the MA, after returning the other airborne lost link aircraft to the MAC GCS for continued mission execution. The CDCS remained configured and searched for the MA for the next 10 hours in all airfield recovery sectors with no success.

Loss of line power to the MAC GCS initiated subsequent MA lost link and emergency mission execution. Two other aircraft were affected by the same situation, but were safely recovered. There is substantial evidence to conclude that hazardous weather during the MA's emergency mission and RTB at 18,000 feet substantially contributed to the mishap and loss of the aircraft. Convective weather was forecast in the area of the recovery route to include broken cloud decks, areas of towering cumulus (TCU) and light in-cloud icing conditions. MA weather scans confirmed the presence of weather in the area. Landing weather at the LRE was not a factor.
